

In re Application of Ragsdale et al.  
Application No. 10/615,283

*AMENDMENTS TO THE CLAIMS*

1. (Currently Amended) An additive suitable for addition to a polyol reactant used in the manufacture of a polymer foam, the additive comprising:

- (a) a benzotriazole, the benzotriazole being present in the additive in an amount of about 0.5 to about 6.0 parts per hundred parts of the polyol (php).[[;]]
- (b) a lactone-based antioxidant having a 3-phenylbenzofuran-2-one structure, the lactone-based antioxidant being present in the additive in an amount of about 0.05 to about 1.0 php, and
- (c) a ~~compound~~ third component selected from the group consisting of:
  - (i) about 0.05 to about 1.0 php of a secondary phenylamine,
  - (ii) about 0.05 to about 2.0 php of a hindered phenol, and
  - (iii) a combination of about 0.05 to about 1.0 php of a secondary phenylamine and about 0.05 to about 2.0 php of a hindered phenol.

~~wherein said additive is effective for reducing undesirable yellowing when applied in a polyurethane foam.~~

2. (Currently Amended) The additive of Claim 1 wherein said ~~compound~~ (e) third component comprises is a secondary phenylamine phenylamine.

3-16. (Canceled)

17. (Currently Amended) The additive of Claim 1 wherein said ~~compound~~ (e) third component comprises is a hindered phenol.

18. (New) The additive of claim 1, wherein said third component is a combination of a secondary phenylamine and a hindered phenol.

19. (New) The additive of claim 1, wherein said additive comprises:

- (a) about 0.8 to about 2.0 php of a benzotriazole,
- (b) about 0.1 to about 0.7 php of a lactone-based antioxidant having a 3-phenylbenzofuran-2-one structure,
- (c) about 0.1 to about 0.5 php of a secondary phenylamine, and

In re Application of Ragsdale et al.  
Application No. 10/615,283

(d) about 0.1 to about 1.5 php of a hindered phenol.

20. (New) The additive of claim 19, wherein said additive comprises:

(a) about 0.8 to about 2.0 php of a benzotriazole,

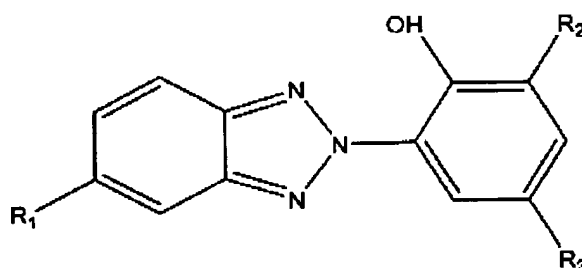
(b) about 0.15 to about 0.3 php of a lactone-based antioxidant having a 3-phenylbenzofuran-2-one structure,

(c) about 0.1 to about 0.5 php of a secondary phenylamine, and

(d) about 0.25 to about 0.65 php of a hindered phenol.

21. (New) The additive of claim 1 wherein said benzotriazole conforms to the structure of Formula (I)

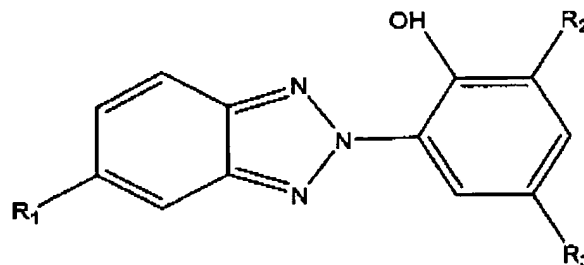
(I)



wherein  $R_1$ ,  $R_2$ , and  $R_3$  are individually selected from the group consisting of hydrogen,  $C_xH_yO_z$ , where  $x$ ,  $y$ , and  $z$  are from 0 to 30, and a halogen.

22. (New) The additive of claim 19 wherein said benzotriazole conforms to the structure of Formula (I)

(I)

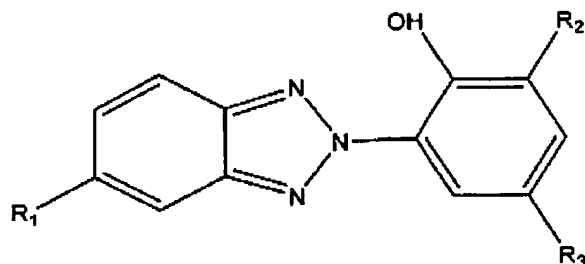


wherein  $R_1$ ,  $R_2$ , and  $R_3$  are individually selected from the group consisting of hydrogen,  $C_xH_yO_z$ , where  $x$ ,  $y$ , and  $z$  are from 0 to 30, and a halogen.

In re Application of Ragsdale et al.  
Application No. 10/615,283

23. (New) The additive of claim 20 wherein said benzotriazole conforms to the structure of Formula (I)

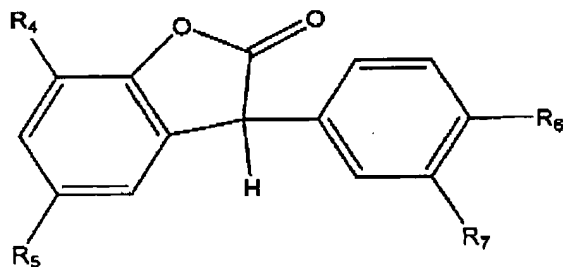
(I)



wherein R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> are individually selected from the group consisting of hydrogen, C<sub>x</sub>H<sub>y</sub>O<sub>z</sub>, where x, y, and z are from 0 to 30, and a halogen.

24. (New) The additive of claim 1 wherein said lactone-based antioxidant conforms to the structure of Formula (II)

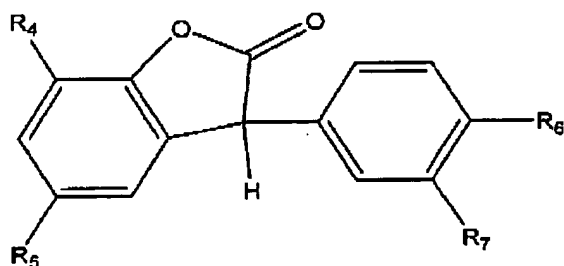
(II)



wherein R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, and R<sub>7</sub> are individually selected from the group consisting of hydrogen and C<sub>1-30</sub> alkyl.

25. (New) The additive of claim 19 wherein said lactone-based antioxidant conforms to the structure of Formula (II)

(II)

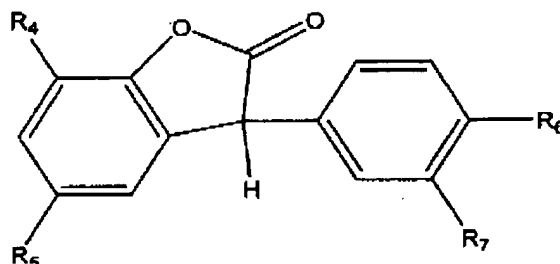


In re Application of Ragsdale et al.  
Application No. 10/615,283

wherein  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  are individually selected from the group consisting of hydrogen and  $C_{1-30}$  alkyl.

26. (New) The additive of claim 20 wherein said lactone-based antioxidant conforms to the structure of Formula (II)

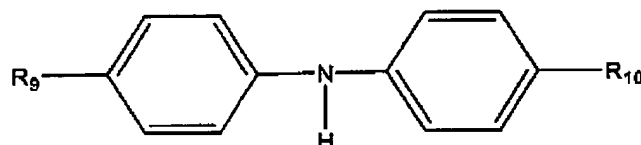
(II)



wherein  $R_4$ ,  $R_5$ ,  $R_6$ , and  $R_7$  are individually selected from the group consisting of hydrogen and  $C_{1-30}$  alkyl.

27. (New) The additive of claim 1 wherein the secondary phenylamine conforms to the structure of Formula (III)

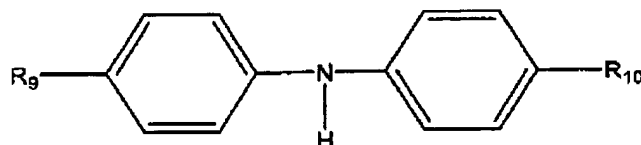
(III)



wherein  $R_9$  and  $R_{10}$  are individually selected from the group consisting of hydrogen,  $C_xH_yO_z$ , where  $x$ ,  $y$ , and  $z$  are from 0 to 30, and a halogen.

28. (New) The additive of claim 19 wherein the secondary phenylamine conforms to the structure of Formula (III)

(III)

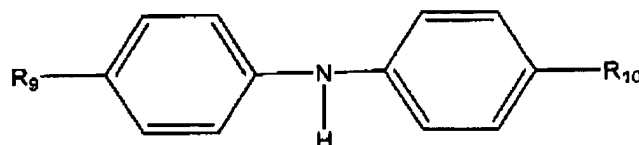


wherein  $R_9$  and  $R_{10}$  are individually selected from the group consisting of hydrogen,  $C_xH_yO_z$ , where  $x$ ,  $y$ , and  $z$  are from 0 to 30, and a halogen.

In re Application of Ragsdale et al.  
Application No. 10/615,283

29. (New) The additive of claim 20 wherein the secondary phenylamine conforms to the structure of Formula (III)

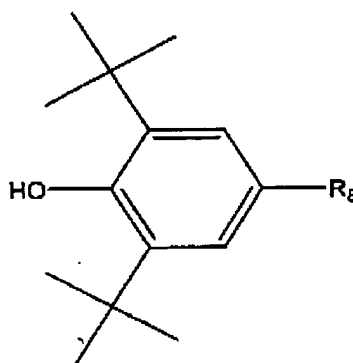
(III)



wherein  $R_9$  and  $R_{10}$  are individually selected from the group consisting of hydrogen,  $C_xH_yO_z$ , where  $x$ ,  $y$ , and  $z$  are from 0 to 30, and a halogen.

30. (New) The additive of claim 1 wherein the hindered phenol conforms to the structure of Formula (IV)

(IV)

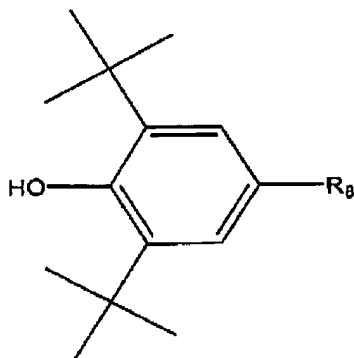


wherein  $R_8$  is selected from the group consisting of hydrogen,  $C_xH_yO_z$ , where  $x$ ,  $y$ , and  $z$  are from 0 to 30, and a halogen.

31. (New) The additive of claim 19 wherein the hindered phenol conforms to the structure of Formula (IV)

In re Application of Ragsdale et al.  
Application No. 10/615,283

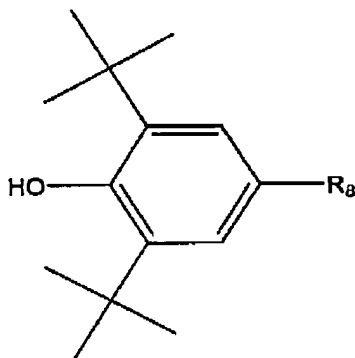
(IV)



wherein R<sub>8</sub> is selected from the group consisting of hydrogen, C<sub>x</sub>H<sub>y</sub>O<sub>z</sub>, where x, y, and z are from 0 to 30, and a halogen.

32. (New) The additive of claim 20 wherein the hindered phenol conforms to the structure of Formula (IV)

(IV)



wherein R<sub>8</sub> is selected from the group consisting of hydrogen, C<sub>x</sub>H<sub>y</sub>O<sub>z</sub>, where x, y, and z are from 0 to 30, and a halogen.